

THE NUTRITIVE VALUE OF FOODS



substituting glucose except perhaps for children or invalids with digestive disorders.

The only foods in this group which have some slight nutritive value, and which therefore are to be preferred on occasions when they can conveniently be substituted for sugar or jams, are golden syrup, treacle, and black currant jam. Golden syrup and treacle are good sources of iron and calcium; 1oz. of golden syrup provides about a tenth of the daily calcium requirement and a sixth of the iron requirement of an adult, and treacle contains about $1\frac{1}{2}$ times as much iron and calcium as golden syrup. Black currant jam is the only jam which contains appreciable amounts of vitamin C, a tablespoonful containing about a tenth of an adult's daily requirement.

As well as being one of the causes of tooth decay, too much sugar may also result in an unbalanced diet and ill health because of the eating of too few of the protective foods—foods supplying minerals and vitamins as well as energy. A lot of sugary foods eaten in addition to the amounts of wholemeal bread, milk, dairy products, and other foods required to provide adequate protein, minerals, and vitamins can cause overweight just as readily as can too many fatty foods.

Consequently, the serving of only sweet biscuits and cakes for morning and afternoon teas and suppers—a frequent habit of New Zealanders—or the inclusion of more than one cake or sweet biscuit in school lunches is not advocated, and sweets should not be eaten by anyone who is overweight.

Dried Fruits

Many people may be surprised to find dried fruits included in the group of foods with low nutritive value,

especially as fresh fruits are an important part of the healthful diet. However, as vitamin C, the only nutrient present in fresh fruits in valuable amounts, usually is destroyed completely when the fruit is dried, much of the nutritional value of the fruit also is lost.

Being concentrated, dried fruits have an energy value comparable to that of jam, honey, or white bread. However, though they have a greater nutrient content than honey or jam, they do not compare favourably with the white bread at present in use in New Zealand. They contain on an average less than a third of the protein and B group vitamins present in white bread and only slightly more iron. With the exception of dried apricots and prunes, they are also negligible sources of vitamin A; prunes and dried apricots are quite good sources of vitamin A, 1oz. of either providing about a fifth of the daily requirement.

Dried fruits are not to be recommended as a substitute for fresh fruits and vegetables, though they are useful for providing variety in puddings or for between-meal snacks for children when fresh fruits are expensive or scarce.

Beverages

Much has been written about the advantages and disadvantages of drinking large quantities of water and other beverages, though all the reliable evidence indicates that, except in certain cases of illness and in fevers, no advantage to health is gained by drinking excessive amounts of water or, in fact, much more than the amount of liquid required to replace adequately the losses in perspiration and other ways. The minimum requirement for these purposes is about $1\frac{1}{2}$ pints each day, but drinking rather more than this amount is probably beneficial.

Properly cooked and flavoured and attractively served, the common foods of the healthful diet appeal to the appetite and retain their full nutritive value, but . . .

Water

Though water obviously is the most natural drink, all waters are by no means equally pleasant to drink and, especially in towns or cities where it has been chlorinated, water may even taste distinctly unpleasant. Especially as no evidence appears to show that the continual use of beverages other than water has a harmful effect on health, and as many healthy people never drink water, it is doubtful whether drinking some part of the daily water requirement as "plain water" is necessary. There seems to be no reason why those people—and it includes most New Zealanders—who prefer tea, or perhaps coffee, cocoa, or fruit drinks, should forgo those pleasures.

Milk, of course, is one beverage which should always be included in the diet, for it has a nutrient value unequalled by other drinks, as well as thirst-quenching ability—in fact, it can quench thirst more successfully than plain water.

Tea, Coffee, and Cocoa

Man has discovered three plants which contain either in their leaves (tea) or seeds (coffee and cocoa) a mixture of substances with an almost universally-acceptable and agreeable flavour and containing a mild stimulant—caffeine (tea and coffee) or theobromine (cocoa). Caffeine and, to a less extent, theobromine are stimulants which, taken in moderate amounts, banish fatigue and clear the mind; in excess they cause sleeplessness.